

AN IMPLEMENTATION GUIDE FOR MANAGEMENT BY
OBJECTIVES AT A NAVAL COMMUNICATIONS STATION

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NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

AN IMPLEMENTATION GUIDE
FOR MANAGEMENT BY OBJECTIVES
AT A NAVAL COMMUNICATIONS STATION

by

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September 1974

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An Implementation Guide
for
Management by Objectives
at a
Naval Communications Station

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ABSTRACT

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I. INTRODUCTION

A. PURPOSE

The purpose of this study was to examine the operations and management relationships within Naval Communications Station (NAVCOMMSTA), San Francisco and develop a practical guide for implementing management by objectives (MBO) at any naval communications station. Observable traits and management relationships were studied through watch standing at NAVCOMMSTA San Francisco, interviews with various upper and middle managers and administering an organizational attitude survey which was developed for this project. These observations assisted the authors in setting reasonable objectives and recommending certain courses of action during the implementation phase of the management guide. The proposed guide should be helpful to anyone desiring to implement this management tool which is well known in private business but relatively new in the public sector.

B. WHY MBO AT A NAVCOMMSTA

Within the private sector managers must operate under the mandate to maximize the return on resources entrusted to them. Managers in the Navy must operate under this same premise although the return on resources cannot be as easily defined as profit in private business. Management at NAVCOMMSTA's is no exception to this basic premise of

management and could be one of the most challenging tasks within the Navy.

During this period of post-Vietnam involvement, all-volunteer force and peacetime budgetary reductions, the communications systems within the Department of Defense (DOD) and the Navy in particular have become more technologically complex and more far reaching than ever before. Consolidation of communications centers as recommended by the Mollohan Subcommittee on Defense Communications in 1972 is far from completion and the automation of individual communications stations is still in progress, (U. S. Congress 1972). The Navy's fleet communications satellite has yet to be launched and many earth installations have not been completed. This will require increased planning for installation and training for personnel to operate the sites. The drain on qualified technicians and operators due to the growing attractiveness of higher paying employment in the civilian communications industry has caused an additional burden for the middle manager by forcing him to assign less qualified personnel to operational billets and use on-the-job training to improve their proficiency. New equipment now reaching the communications stations must be integrated with existing old equipment and the management of this diversified system is a complex task.

Rear Admiral Nagler, Deputy Director Naval Telecommunications Command, in an address to members of the Communications Management curriculum at the Naval Postgraduate School, in Monterey, in May 1974

pointed to the lack of adequate measures of effectiveness at a NAVCOMM-STA as another area which keeps the managers of a communications station from performing their mission in an efficient manner.

C. MBO--PRESENT USES

Management by objectives, as a management tool, has proved very effective in both private and public organizations. In the private sector, the profit motive lends itself easily to goal setting and the results oriented nature of MBO, but the lack of the profit initiative is not necessarily a limiting factor as to its usefulness in an environment of a non-profit organization. McConkey [1973] observed MBO as a "possible" management tool if the answer to some of the questions below can be answered in the affirmative.

1. Does the organization have a mission to perform?
Is there a valid reason for it to exist?
2. Does management have assets (money, people, plant and equipment) entrusted to it?
3. Is management accountable to some person or authority for a return on the assets?
4. Can the operation be planned?
5. Can accountabilities of key personnel be pinpointed?
6. Is it possible to evaluate the performance of key personnel?
7. Is management receptive to improved methods of operating?

The answer to some or all of these questions has been positive in several instances within the federal government. A recent application of MBO can be observed in the operation of the Office of Management and Budget (OMB), an office within the Executive Office of the President. Fred Zimmerman [1974] in The Wall Street Journal reported OMB was trying to improve federal management techniques by applying MBO in several agencies.

Rodney Brady, the Assistant Secretary for Administration and Management of the U. S. Department of Health, Education and Welfare (HEW) from 1970 to 1972 was deeply involved in the implementation of management by objectives in this huge organization. Brady admitted problems did arise during the implementation phase that are quite unique to governmental agencies and identifying clear, measurable objectives was one of the largest problems to overcome. HEW has been utilizing MBO as its primary management device for the past four years and Mr. Brady feels this management tool to be invaluable to public sector management if approached in the correct manner.

The method finally used in this study closely resembles the methods HEW used for the introduction of MBO into the framework of the department and will be discussed in Section III.

The Bureau of Naval Personnel has recently emphasized the importance of management by objectives when the new fitness report for officers was introduced to the fleet on 31 January 1974. In the area of "specific aspects of performance" 1) goal setting, 2) subordinate

management and development, 3) equipment and material management and 4) working relations are integral parts in the performance evaluation of the individual naval officer. BUPERS INST 1611.12D, the guiding instruction for the new fitness report, states

In order to foster the concept of "management by objectives," reporting seniors should seek to establish with each and every subordinate mutually understood, finite objectives for which the subordinate will be held accountable. Subsequent fitness reports should then contain comment upon the degree of attainment of each such objective.

It is the opinion of the authors MBO has proven useful in governmental agencies as pointed out by McConkey [1973] and Brady [1973] and can be a helpful management device in the dynamic environment of naval communications. Moreover, the tools available in a MBO system can be applied to performance evaluation of officers and senior enlisted in the organization and could assist both top and middle management in keeping in consonance with the philosophy of the U. S. Navy in its attitude toward development of its officer corps by personal counselling and the individual guidance of commanding officers.

Prior to the authors' first visit at NAVCOMMSTA San Francisco, a thorough examination of methods of implementing MBO in both the private and public sector was conducted. In the process it was decided an organizational attitude survey would be utilized to locate areas in the organization that could be improved by MBO methods. A post test was intended to be administered to determine the effects of the MBO system

on the personnel if the system was implemented. A readiness survey developed by Varney [1971] was also utilized to determine management's readiness to implement the system. The instruments and results of the surveys will be discussed in Section IV under Data Collection.

From the research data obtained from the surveys and personal interviews with the managers and their subordinates, it was concluded that MBO could be a useful tool in the management of a communications station and it was felt a method of implementation could be devised to suit the unique environment.

II. A REVIEW OF MANAGEMENT BY OBJECTIVES

A. BACKGROUND

Management by Objectives is a deceptively simple management system. It emerged in the 1950's when experience with two earlier 20th century schools of management thought were found to be lacking in certain respects. Scientific management, which originated with Taylor [1947], sought to measure performance and assign work based on engineering standards or rates of output per unit of time. This technique tended to dehumanize labor and alienate the worker from his work. The Human Relations movement which followed, sought to increase production by treating workers as individuals and increasing their motivation. While this technique has proved effective in many applications it was found that one could create happy workers who were not productive. MBO shifts the focus from the personality of the individual to the results achieved by him. MBO seeks to align individual effort with organizational goals and measure the results obtained. A good working definition of MBO is provided by Odiorne [1965]:

"The system of MBO can be described as a process whereby the superior and subordinate managers of an organization jointly identify its common goals, define each individuals major areas of responsibility in terms of the results expected of him, and use these measures as guides for operating the unit and assessing the contribution of each of its members."

Good managers have probably been practicing techniques similar to MBO for a long time. However Peter Drucker [1954] was the first to formalize and articulate MBO as a system. Drucker stressed the importance of managing by objectives rather than by directives. He proposed that each manager regardless of his level should have clear cut objectives that support the overall organizational objectives. The setting of objectives should be an interactive process between a manager and his superior. Once the superior has approved the manager's objectives they become a performance guide for the manager. Drucker saw MBO primarily as a means of integrating the activities of an organization and balancing its objectives.

Douglas McGregor [1957] was also an early advocate of MBO but he focused on its usefulness as a performance appraisal technique. He pointed out that appraisal by personality traits was subjective and could cause discomfort for both the evaluator and the person being appraised. He proposed that short-term performance goals that were agreed on by a manager and his superior would provide a better standard. This would provide the subordinate a better means of self appraisal and would allow the superior to act more as a coach than a judge.

Since the early writings of Drucker and McGregor, MBO has been widely implemented by many companies (International Business Machines, United Fruit, Black and Decker, Hewlett-Packard, and General Electric to name just a few). It also appears under other names such as "Management by Results," "Goals and Controls," "Work Planning and

Review," and "Objective Centered Performance Appraisal Process."

MBO has spread to many other countries as well.

There has been an extensive amount of literature developed to parallel the expanding implementation of MBO. Numerous how-to-do-it manuals have been produced by leading management consultants including Mali [1972], Ordiorne [1965], McConkey [1965], and Reddin [1970]. There is also a great deal of periodical literature dealing with the strengths and weaknesses of MBO, some of which will be examined later.

While the authorities hold somewhat differing views on how to use MBO, all agree that it includes as a minimum the establishment of overall organizational goals, the setting and alignment of individual goals to support organizational goals, and periodic performance reviews. Carroll and Tosi [1973] list five elements as necessary for an effective MBO program:

1. Effective goal setting and planning by top levels of the managerial hierarchy.
2. Organizational commitment to this approach.
3. Mutual goal setting.
4. Frequent performance review.
5. Some degree of freedom in developing means for the achievement of objectives.

An excellent statement of what MBO means to a current practitioner is provided by the following quote from Hewlett-Packard [1974]:

In discussing HP operating policies, we often refer to the concept of 'management by objective.' By this we mean that insofar as possible each individual at each level in the organization should make his own plans to achieve company objectives and goals. After receiving approval of his plans from his supervisor, he should be given a wide degree of freedom to work within the limitations imposed by these plans, and by our general corporate policies. Finally, his performance should be judged on the basis of how well he achieves the goals he helped establish.

The successful practice of 'management by objective' is a two-way street. Management must be sure that each individual understands the immediate objectives, as well as corporate goals and policies. Thus a primary HP management responsibility is communication and mutual understanding. Conversely every employee must take sufficient interest in his work to want to plan it, to propose new solutions to old problems, to stick his neck out when he has something to contribute. 'Management by objective' as opposed to management by directive, offers opportunity for individual freedom and contribution; it also imposes an obligation for everyone to exercise initiative and enthusiasm.

While this statement might seem a bit heretical in military circles, it does offer food for thought.

B. MBO PROCEDURES

This study has followed rather closely the MBO procedures proposed by Mali [1972]. He considers MBO to be the following five-phase process carried out in sequence:

1. Finding the objective.
2. Setting the objective.
3. Validating the objective.
4. Implementing the objective.
5. Controlling and reporting status of the objective.

Finding the objective first involves asking such basic questions as where are we, how did we get there, and where do we want to go. By examining past performance, strengths and weaknesses are identified and opportunities for improvement are indicated. Areas that normally provide broad objectives are manpower utilization, cost reduction, methods improvement, facility improvement, and subordinate motivation.

Setting the objective involves refining the broad objectives to specific, measureable statements. The field of good ideas is narrowed to only the most important items, the ones with the greatest potential payoff. The statement is mutually agreed upon by the different levels involved and interlocked to "feed" into the overall organizational objectives. Objective setting is treated in detail in Section V.

The objective must next be validated to ensure feasibility. Risks and confidence levels must be measured at this point. Techniques such as PERT, simulation, and venture analysis are used to establish the validity of an objective. The process of validation will normally cause some of the objectives to be discarded as infeasible or unattainable. Once an objective has been validated it becomes a statement of commitment for the parties involved.

Once the objective has been validated a strategy for implementing it is developed. At this point specific plans are made and resources allocated for achieving the objective. A system of planned motivation [Herzberg, 1968] is developed as part of the implementation process.

This requires the participant to devise plans for motivating, coaching, and persuading his subordinates to accomplish the desired objectives.

The final step involves controlling and reporting the status of the objective. This phase is based on the principle that progress can only be measured in terms of what one is trying to make progress toward. This step includes the personnel appraisal process as well. While Mali doesn't place great emphasis on personnel appraisal, other authorities consider this one of the most important advantages of MBO. Time based schedules are used to chart progress and identify problem areas. The use of time phased objectives provides feedback to both superior and subordinate.

The problem of whether MBO should be used as a technique for integrating an organization's activities or for personnel appraisal can be easily solved since it can be used for either or both. Most actual experience with MBO indicates that it is used for both. Top management must decide simply where to place the emphasis.

C. RESEARCH ON MBO

Since the mid 1960's there has been a large amount of research conducted that directly relates to MBO. These studies have shown that MBO offers significant benefits in the areas of participation, goal setting (planning), increased productivity, and performance appraisal. Negative aspects include excessive paperwork, lack of flexibility, difficulties in measuring goals, and time consumption. Problem areas are often found

in the implementation of an MBO program, amount of feedback, and the degree of organizational commitment. Each of these areas will be examined more closely.

Participation in decision making and job structuring has been proven to be an effective means of increasing performance levels and job satisfaction. [Coch and French 1948]. It can lead to increased productivity and greater acceptance of decisions. The MBO requirement for mutual goal setting and performance reviews can easily fill the need for greater employee participation.

Goal setting which is closely related to participation also has a positive effect on performance. Meyer et al. [1965] found that performance improves most when specific goals are established. By comparing the performance of a test group of managers who were granted high participation in the goal setting process with a control group who participated little, they concluded that, "Improved performance is realized only when specified goals and deadlines are mutually established and agreed on by the subordinate." However they also found that a typical manager who is accustomed to high participation in organizational decision making performs better with goals he sets himself. Managers who are accustomed to low participation perform better when their superiors play the major role in setting their goals. The most important find was that goal setting per se improved performance, regardless of how they were set. In a later study [Carroll and Tosi 1973] it was determined that as goals became more clear, important, and relevant, managers

were more positive toward MBO and toward their boss. More difficult goals were associated with more positive feeling toward the MBO program.

While many studies speak of increases in productivity due to MBO, Raia [1965] in his study at the Purex Corporation offers the strongest empirical data. By analyzing production reports, computer control reports and performance reviews for a three year period, he determined that average productivity was decreasing at a rate of 0.4 per cent per month during a thirteen month period prior to implementing MBO. In a thirteen month period after the introduction of MBO average productivity was 18 per cent higher and increasing at a rate of 0.3 per cent per month.

Raia's study also indicated that managers felt the MBO program provided a more objective basis for performance evaluation. As one manager stated, "Top management can now look at the results of my work. I know I'm being judged by my performance, and not by the way I comb my hair." Managers also indicated that performance reviews "were instrumental in identifying and removing obstacles to better performance." Meyer et al. [1965] found that traditional annual evaluations based on trait appraisals did not serve to motivate subordinates or help improve performance. More frequent performance evaluations based on specific goals were found to be much more effective. Motivation and performance was improved by the appraiser acting more as a counselor than as a judge. Carrol and Tosi [1973] also confirm that more

frequent review sessions were associated with higher goal accomplishment and improved relations with the boss.

Most of the studies [Raia, 1965], [Ivancevich et al., 1970], [Carroll and Tosi, 1973] conducted on MBO have indicated that many participants feel that MBO is time consuming and involves excessive paper work. There is no doubt that MBO can be time consuming, but the more time expended on it, particularly during implementation, the greater the eventual payoff [McConkey, 1972]. Perhaps MBO type "planning is put off as long as possible because it makes us do three things we don't like to do [Green, 1966]; we have to think, we have to do paperwork, and we have to use orderly procedures." The paperwork involved need not be excessive, some practitioners have limited it to one page per manager, typed in triplicate [Lasagna, 1971]. Further it can be used as a total management system or limited to performance evaluation and planning.

Measuring performance and objectives can be difficult in areas where output is not readily quantifiable. Production type goals such as so many units per hour are much easier to measure than personnel development or improved customer service. As Levinson [1970] points out, it is easy to latch on to measurable quantities and overlook the big picture. However, goals need not be measurable, providing they are verifiable. Any goal or objective which is tied to a completion date is verifiable and as such, can provide the same benefits in an MBO program as the measurable production goal [Raia, 1965].

One, well documented, failure of MBO [Wickens 1968] indicated that the program failed largely due to conflicting goals being set within the company and lack of flexibility in adjusting to a rapidly changing market situation. The conflicting goals arose largely due to faulty organizational structure, not from a defect in the MBO program. The problem of flexibility deserves greater attention. The objective setting and controlling process must allow for goals to be changed and discarded, if the situation so dictates. Rigid adherence to form must give way to new requirements. A means must be provided for frequently reviewing and updating objectives when necessary. It is worthwhile to note that the failure of the MBO program helped point out organizational weaknesses that were subsequently corrected. The company later developed a four step planning program that closely resembles MBO.

Experience indicates that a successful MBO program depends heavily on how it is implemented. A study of implementation methods as related to later success indicates a high degree of correlation in over 300 different MBO programs [McConkey, 1972]. Those organizations, which expended the time and effort to implement the program properly, reaped the greatest benefits. Preparations normally include two or three months of reading, discussion, and workshop sessions to become thoroughly acquainted with the program. Normally, MBO is implemented at one management level at a time or in one department only for a pilot project. Implementation throughout an organization is considered to be a very optimistic undertaking. After a dry run period for getting

acquainted with the program, MBO can be expanded gradually throughout the organization. McConkey [1972] estimates that it takes a minimum of three years for MBO to reach 85 per cent effectiveness. Line rather than staff implementation [Ivancevich et al, 1970] also appears to be very important for MBO success. The old cliches of "getting off to a good start" and "you get out of it what you put into it" seem to apply very nicely to MBO.

The use of a third party consultant well versed in MBO has been used effectively to implement MBO [Lasagna, 1971]. The consultant makes himself available to assist managers in writing objectives and sits in when objectives are reviewed between superior and subordinate. His special skills can thus add impetus to the program.

The need for frequent feedback, also appears to be vital for a successful MBO program. Studies have shown that a review process that provides frequent feedback was associated with; 1) higher reported goal accomplishment, 2) improved relations with the boss, and 3) higher satisfaction with the MBO program [Carroll and Tosi, 1973]. It is most helpful when it is timely, specific, and task relevant. Lasagna [1971] recommends a review period of between two and six months or one keyed to the first target date on the objectives list.

While the need for organizational support of the program appears obvious, it is perhaps worth citing some empirical data on this subject [Carroll and Tosi, 1973]:

The more time the boss spent on MBO,

- a. the more satisfied the subordinate was with MBO.
- b. the greater the perceived goal success.
- c. the more improved the relationship with the boss.
- d. the lower the perceived effort increase.
- e. the more perceived organizational support for MBO,
the more satisfied the subordinate with MBO.
- f. the greater the amount of perceived usual participation,
the more improved relationship with the boss.
- g. higher levels of boss involvement in the subordinate's
job were associated with improved relationships with
the boss.

While MBO is not a panacea for management problems, it does appear to be an effective system when properly applied. The mere fact of its wide acceptance in industry suggests that the practicing manager should give it careful consideration.

III. METHODOLOGY

A. GENERAL APPROACH

NAVCOMMSTA San Francisco, located at Stockton, California, was selected as the site for this study due to its relative proximity to the Naval Postgraduate School, Monterey. The objectives of this study were two-fold; learn something about the management of a naval communication station, and study the implementation of a new management technique. To accomplish this, the authors made eight one day visits to Stockton and stood two six-hour evening watches in the technical control (tech control) area of the communication center. During this time interviews were conducted with the commanding officer, communication officer, tech control officer and the other communications personnel. Operations in the tech control area were observed in detail and various operating publications were examined.

The COMMSTA is administratively organized in standard naval fashion. The station is organized into seven departments; Administration, Supply, Public Works, Operations and Plans, Communications, Security, and Medical/Dental. Each department head reports directly to the commanding officer for operational matters and to the executive officer for administrative matters. The communication department is divided primarily into three divisions: fleet center, technical control, and repair.

The mission of NAVCOMMSTA SFRAN as stated in Commander, Naval Communications Command Instruction C5450.32A is:

As an activity of the Naval Communications System, to manage, operate and maintain those facilities, systems, equipments, and devices necessary to provide requisite communications for the command, operational control, and administration of the Naval Establishment; to manage, operate and maintain those facilities of the Defense Communications System as assigned; and to perform such other functions as may be directed by the Chief of Naval Operations.

The cited instruction also lists several specific tasks to be performed in accomplishing the above mission.

After the first visit to Stockton, the authors decided to focus on the management relations in the following chain of command:

Commanding Officer

Communications Officer

Technical Control Officer

Technical Control Watch Supervisors

Tech control was chosen for study due to its critical position in the communication center. All circuits originating from, terminating at, or passing through the station are monitored for quality and performance in tech control. Coordination of transmitter sites, receiver sites and circuit routing is accomplished there. Proper communication performance depends heavily on tech control maintaining their assigned circuits in good operating condition. Further it appeared that quantifiable measures of effectiveness could be established rather easily in this area.

There had been an earlier MBO project [DeRoco and Grutzius, 1973] conducted at Stockton that influenced the authors' approach to this study.

DeRoco and Grutzius had attempted a fairly ambitious project, implementing MBO throughout the communications department. Most of the communications department managers were acquainted with the basic tenets of MBO, as a result of this recent study. However, there was no evidence that a formal MBO program was still being pursued. Based on the above, the authors decided to limit this project to implementing MBO in the direct chain of command from the commanding officer to the tech control watch supervisors.

B. ORIGINAL PLAN OF IMPLEMENTATION

The original plan of implementation was to rely heavily on the one on one MBO advisor procedure proposed by Reddin [1970]. This procedure called for the authors to act as MBO advisors to the different management levels involved in the program. By dealing individually with each manager, the MBO advisor can explain the program, answer questions, and assist with writing objectives. It was hoped that this procedure would obviate the need for group indoctrination sessions and additional MBO homework by the managers themselves. Further, a good bit of indoctrination had been accomplished as part of the De Roco and Grutzius study.

The authors planned to employ three separate vehicles at the start of the implementation phase: an organizational attitude survey (Appendix A), an MBO readiness questionnaire (Appendix B), and a work performance folder (Appendix C) with its attendant instructions (Appendix D). The organizational attitude survey was designed to be administered to non-managerial personnel. The MBO readiness questionnaire was to be

administered to the managers in the selected chain of command. The results of the survey and questionnaire are discussed in Section IV.

The work performance folder was intended to be the primary document used for implementation. This folder had been developed by Dr. G. L. Musgrave and Dr. R. S. Elster, U. S. Naval Postgraduate School, Monterey for use in an earlier MBO project at the U. S. Naval Supply Center, San Diego, California. The purpose of the folder is to provide a means for the individual manager to organize his personal plans and objectives as they relate to his job. In this project each manager was to complete one folder for himself and one for his subordinate in the selected chain of command. Each manager and his subordinate would then meet together with the MBO advisor to work out an agreed upon set of objectives for the subordinate manager. Once an agreed upon set of objectives was reached, these objectives would be recorded in smooth form in the folder and serve as a guideline for measuring objective attainment and managerial effectiveness. The folder is considered to be an excellent vehicle for encouraging goal setting and managerial participation in the decision making process. The instruction sheet was intended to provide a short introduction to MBO and the objective setting process.

Since the time available to conduct the study was limited by other academic requirements and the travel time involved, it was decided to administer the survey and questionnaire while at the same time starting to work on the folders. A better approach would have been to let the data obtained from the MBO Readiness Survey indicate the pace to proceed

with the folder. The commanding officer gave tacit approval to the general procedures for the study during the third visit to Stockton. At this point the communications officer had expressed enthusiasm toward the MBO approach.

C. MODIFICATIONS TO THE IMPLEMENTATION PLAN

The survey, questionnaire, and work folder were presented to the commanding officer for his final approval during the next visit. The survey and questionnaire were approved, but there was an objection to the proposed manner of completing the work folder. The commanding officer stated that the authors were asking the COMMSTA to collect data for this study when it was properly the job of the authors. He proposed that the authors write objectives for each level of the chain of command instead of the managers writing their own objectives. The managers would then critique the objectives and use what they considered worthwhile. While this modification seriously inhibited the participation aspect of MBO, the authors agreed in order to continue the study. As future communications managers, the goal writing experience would provide excellent training for the authors in both communications and MBO. The commanding officer further stated that he didn't consider that his middle managers completely understood MBO nor were they ready to implement it.

This modification caused the scope of the study to be further reduced. It was decided to limit the objective writing to the levels of the commanding officer, communication officer, and tech control officer. The authors

had neither the time nor the communications experience to write objectives for the lower level managers.

Two review and critique sessions of the authors' objectives were conducted with the three managerial levels. As could be expected, several objectives were revised or discarded as being impractical. The objective setting process is treated in detail in Section V.

After the second review session, sections A through D of the folders were completed by the commanding officer and the communications officer. The study was terminated at this point due to an approaching change of command at the COMMSTA and the authors graduation. The commanding officer felt that if the goals decided upon were worthwhile they would endure. He further stated that information concerning this study would be passed along to his relief.

IV. DATA COLLECTION

Generally stated, the purpose of the data collection was designed to establish a base-line for the organizational attitudes of two divisions within the Communications Department. Fleet center was to be used as a control group in which MBO would not be implemented and the technical control as the test group which would use management by objectives. Any additional information gained, such as trends within certain ratings or within the different divisions, if identifiable, would be utilized in the goal setting phase of the study. A post test was to be administered a month following the implementation of MBO to determine any changes in attitude within the division or if new trends within the superior/sub-ordinate relationships arose.

A. TEST/CONTROL GROUPS

An understanding of the organizational structure and the functional activities of the two divisions was an aid in establishing the relationship between the supervisors and the subordinates of the two groups. Fleet center is basically a message handling entity taking paper tape outputs from a portion of the automated system which is a Defense Communications System (DCS) terminal and running it through a teletype terminal for the fleet broadcast. Other terminals are used to communicate with ships terminating with the communications station relaying traffic on an on-call basis. Fleet center has one officer in charge of fifty-nine

enlisted personnel who stand a four section watch. Another fifty-seven civilian employees comprise the manning of fleet center and are integrated into the watch sections with the Navy personnel but are administratively under the control of the communications officer. Even though Navy and civilian personnel stand similar watch hours and are considered part of fleet center operationally, the civilians were not included in the attitude survey because of the physical separation of their watch stations in the center, lack of a common administrative chain of command with the communications officer and the absence of any civilians in technical control.

Seven of the most important functions of tech control are as listed:

1. Operate and maintain Variable Frequency Carrier Telegraph (VFCT) equipment and Radio Frequency Carrier Shift (RFCS) equipment on circuits to ships.
2. Operate on-line cryptographic equipment for all teletype circuits.
3. Control the orderwire system between the COMMSTA and the receiver and transmitter sites and ships utilizing VFCT and RFCS.
4. Direct frequency shifts on all receive circuits.
5. Coordinate circuit and channel routing for common users.
6. Monitor, test and analyze all circuits to ensure circuit continuity and quality.
7. Keep statistical records and files as required by Defense Communications Agency and Naval Telecommunications Command's directives.

Technical control has two officers and forty-five enlisted personnel to carry out these functions. The watch sections are arranged in much the same manner as fleet center except there are no civilian communication control technicians. All watch sections are supervised by a senior petty officer and stand a 2-2-2-80 rotation, (six days of one watch per day then 80 hours off) as at most COMMSTA's. In addition to the regular watchstanders tech control has five "day workers." These individuals stand no watches but are used in administrative billets. One officer is in charge of the Communications Assistance Team (CAT) which is composed of the officer and qualified control technicians from the watch sections plus at least one of the day workers. This team visits ships upon the request of the ship's commanding officer to offer feedback and liaison between the ship's communicators and the COMMSTA to improve communications procedures. Overall it was found that technical control had a few more senior enlisted than fleet center, but both divisions had the same number in the middle rates, with fleet center having a few more junior members. Within the officer ranks, technical control had the greater expertise with two LDO Lieutenant junior-grade officers as compared to a middle grade Ensign in fleet center.

B. INTENT OF THE SURVEYS

There are very few government agencies or large corporations in the United States today that have not used some form of organizational climate or attitude survey to measure the morale or attitude of employees

toward management and the employees' work situation [see Masse 1971]. The organizational attitude survey developed by the authors was used to assist in the evaluation of the effectiveness of MBO on the non-managers within the organizational structure in which the system was to be implemented. The assumption was that fleet center and technical control were homogeneous groups of near equal peers. A correlation would be computed after the first survey was administered to determine if this was a correct assumption. Another assumption that had to be made was that any improvement in the weighted raw scores of technical control on the post-test as compared to the pre-test of the total or that of the pre-test administered to technical control would indicate an improvement in the overall attitude of the test division. In addition to the information gained by the pre/post tests it was hoped that some correlation could be found between the apparent attitude of the personnel and the personal communications between the individuals and their supervisors.

The MBO Readiness Questionnaire [Varney 1971] was used by the authors to evaluate the supervisors' perception of their subordinates working under a system such as MBO and their attitudes as to how they think they manage their subordinates. According to Varney, a manager with a high score, or in the MBO range on the S/J scale in Appendix B would indicate that the manager perceived his subordinates working well in an MBO environment. If he scored high on the S/S scale he was actually managing in many respects similar to one who uses MBO as a management tool. It was the intention of the authors to observe the basic philosophies

of management held by the various personnel in supervisory positions indicated by the scores obtained by this instrument. This was just one more step in an attempt to understand the organization's views of management and control.

C. DESCRIPTION OF THE SURVEYS

1. Organizational Attitude

Questions were designed utilizing questionnaires developed by the Navy's Office of Civilian Manpower Management (OCMM), Data Solutions Corporation and one developed by Dr. G. L. Musgrave of the Naval Postgraduate School. The program areas covered by the questionnaire were as follows:

1. Planning
2. Morale
3. Merit
4. Performance Evaluation
5. Supervision
6. Training
7. Personal Communications
8. Management/Subordinate Relationships

The first sixteen questions were basically designed with the eight programs above in mind. According to how the questions were answered, it was possible to determine a relative indicator of job satisfaction in the two divisions. The remaining four of the twenty questions were

related to MBO facets of managing personnel. It was the intention of the authors to see if job satisfaction could be positively correlated to personal communications and other aspects of a MBO system. The classical statistical validation process was not conducted on the instrument, but it must be emphasized at this point that the purpose was to have pre/post tests using the same instrument in each case. Appendix A contains the attitude survey.

2. MBO Readiness

The readiness questionnaire utilized in this study was developed by Dr. Glenn H. Varney, the president of Management Advisory Associated, Inc. Some of the wording in the questionnaire was altered by the authors to accommodate a Navy environment and expressions to enhance its comprehension. Admittedly, changing "employee" to "subordinate" and other similar alternations may seem like minute and unnecessary busy-work to one unfamiliar to the environment within the Navy, but it was the opinion of the authors that it was important for all the subjects to have as few doubts about the meanings of the questions as possible. The authors believe the significance of the questions were not altered with the slight changes in the wording. Appendix B contains the readiness questionnaire, the marking instructions and the MBO scales. For a more complete discussion of Varney's questionnaire see Management by Objectives [Varney 1971].

D. ANALYSIS OF DATA

1. Organizational Attitude

Several factors must be considered in the discussion of this survey. First, it must be pointed out that there was a change in managerial positions in both technical control and fleet center immediately prior to the administration of the survey. The fleet center officer was transferred to the operations and plans department and was relieved by his assistant, a comparative newcomer to communications and the Navy. The technical control officer was "fleeted up" to communications officer and was relieved by his assistant, who had many years of communications technical control experience. Several of the watch supervisors were also transferred prior to the survey. The individuals answering the questions were instructed to respond to the questions in regard to previous supervisors if the present supervisor had been in the position for less than a month. These factors were thought to be of little significance. Distortion due to attitudes about present supervisors (if new) was ruled out because the uncontrollable effects operated similarly in both the control and the test groups.

Out of the total of thirty-nine personnel in technical control given the survey twenty-four questionnaires were returned. Of the fifty-nine individuals in fleet center asked to respond only twenty-five returned the survey. Admittedly, these factors made the sample size of forty-nine much smaller than was desired but was considered adequate for the purpose of the study.

The responses to the first sixteen questions of the survey were scored with the most positive attitude marked as +2 with the most negative -2. An answer of "don't know" was evaluated as a zero response. The total score for each question in each pay grade was totaled along with a running total of the first sixteen questions for each division and a total for the two divisions was also compiled. For the last four questions the most negative response in respect to the criteria the authors evaluated as MBO related was scored as a +1 ascending to either a 4 or 5 for the most positive response according to the number available.

Combining the responses of technical control and fleet center (N=49) the total of the first sixteen questions, which were job satisfaction related, was compared to the total of the last four questions, which were MBO related. Question 17 had a correlation factor with the total of the first sixteen questions of $r=.37$, 18 $r=.4$, 19 $r=.39$ and 20 $r=.57$.

The cumulative total of the weighted responses for the last four questions was then compared to the total for the first sixteen which computed to a correlation factor (r) of .67. This indicated to the authors those personnel who seemed most satisfied with their jobs and had the better attitudes toward the organization were more likely to have had more contact with their supervisors in relation to work performance evaluation and had some idea of objectives for the coming year. It also indicated they were pleased with the discussions they had with their supervisors and thought their supervisors were aware of what their individual job entailed and how well it was being done. On the other hand, the

authors concluded that those individuals who were more dissatisfied with the organization and their jobs were unhappy with the results of discussions with supervisors, or had no discussions at all.

The authors consider this a major finding in that through the goal setting process of MBO, which is discussed in the next section, it is necessary for superiors and subordinates to enter into discussions concerning job performance, individual goals and organization objectives. These discussions could possibly lead to a better personal relationship between individuals and more job satisfaction. The strong correlation factor of .67 found at Stockton substantiated earlier findings relating job satisfaction to personal communications [Meyer, et al. 1965, Raia 1965, Tosi and Carroll 1970].

Another analysis used on the information obtained was a comparison of the cumulative responses of the first sixteen questions answered by technical control with the results from fleet center. The purpose of this was to determine if the two groups' organizational attitudes were similar. The information obtained from the pre-test would also be compared to the post-test for any changes noted in the attitudes in technical control over the test period.

The approach used for this analysis was the Student "t" because of the small sample size $N_{t_1} = 24$ for technical control and $N_{f_1} = 25$ for fleet center. Another reason for using this technique was that it lends itself quite nicely to the comparison of changes. In determining the similarity between the test and control groups a mean of 4.958 with a

standard deviation of 9.309 was computed for technical control while a mean of 3.960 and a standard deviation of 8.309 was established for fleet center. The final "t" statistic computed was 0.79789. This indicates the original survey found no statistical differences in job satisfaction and organizational attitude in the two groups. .

Unfortunately, a post-test for the two groups was not administered because implementation of MBO never reached the level covered by this instrument before the study was concluded. For the edification of the division officer involved a post-test will be conducted at some future date to assist him in an evaluation of his leadership techniques; but it is the opinion of the authors it would be of little value to this study unless management by objectives was actually implemented in his division.

2. MBO Readiness

This analysis was straightforward using the grading scheme and scales developed by Varney [1971]. Even though responses were not received from all the officers in the chain of command, it was observed that the officers who did respond perceived their subordinates as working under such a system as MBO, i. e., in the MBO range as depicted in Appendix B. An interesting point in the officers' profiles is in the way they actually manage. They were definitely in the MBO transitional range which when comparing the two scales would indicate the possibility the officers may manage people contradictory to how they think they manage them. This same dichotomy seemed to prevail throughout the

supervisors (E-8---E-6) but is not as obvious. Within the watch supervisors on the S/J a mean of 5.4, high of 9, low of 3 with a range of 6 was computed. On the S/S scale a mean of 3.6, high of 6, low of 2 and a range of 4 was observed. This placed the "average" watch supervisor well in the MBO transition range as to how the supervisor saw his subordinates managing their own job. The watch supervisor, however, was on the average, in the low transitional range which indicates how he manages. This indicated to the authors the supervisors were able to make the transition to MBO but would require assistance from their immediate superiors in management development.

V. SETTING OBJECTIVES

A. PURPOSE

A vital part of management by objectives is the ability of the manager to set relevant and realizable objectives. Every manager has these goals somewhere in the back of his mind but, for the most part, has not formalized them to the point he is truly aware of the present status of his position within the organization or in what direction he may be headed. The fundamental purpose of this phase is for the manager to understand how his performance is related to the overall objectives of the organization and to map out his plans for both self improvement and his unit's attainment of the organization's goals. It cannot be overly emphasized that the organization must have its goals formalized and in writing so the manager can concentrate his goal setting effort in the same direction of the organization.

The manager must also evaluate how subordinates affect the attainment of the organization's objectives and how he might better ensure that consistency exists between their perception of the goals of the organization and those of the individual unit. As can be seen, the objective setting phase of the MBO implementation process can contain long periods of soul searching and head scratching.

B. THE OBJECTIVES

Most authorities agree the objectives used for MBO are a combination of individual objectives that are as congruent as possible with the goals of the organization [Carroll and Tosi 1973]. Before sitting down to write an objective, the manager had best know what an objective is and be able to identify one if he saw it.

An objective, as used in this study, could be defined as a performance that directs a person or an organization to a desired result within a given time frame. A goal should describe outcomes (ends) and not processes (means). Once the performances that collectively define a goal are known the manager is in a much better position to decide which of those performances can be measured to quantify progress toward a goal. In this sense, it is necessary that the manager know his own job and those of his subordinates thoroughly. In order to identify an objective the manager must look to where he is putting his effort, what is going on during the actual operation of his job and what kind of outputs he can expect [Varney 1971]. During this "position audit" it is not uncommon for the manager to reach an idea of his perceived objectives. An analysis of these objectives could prove that these statements are not objectives but only actions or processes. Mager [1972] has the following questions which can be utilized in goal analysis:

1. What will you take as evidence that the goal has been achieved?

2. How could you separate a room full of people in two piles:
one pile containing those who have achieved the goal; the
other pile containing those who had not achieved the goal?
3. How will someone else be able to identify a person who has
fulfilled the goal?
4. Think of someone who has met the goal; write down the things
he does (or does not do) that causes you to say he has fulfilled
the goal.
5. Think of someone who has not met the goal; write down the
things he does that causes you to say he has not fulfilled the
goal.

After the analysis, the manager should re-write his goals in such a way as to achieve meaningful results from the questions above. Original goals are many times abstractions which clutter the mind with lofty thoughts but are not quantifiable. A typical one in the Navy may be, "Make my department the happiest department in the organization." This would qualify without question as a Mager "fuzzy", i. e., an abstraction. The department head might have a difficult time measuring "happiness" in an effective manner unless he wanted to quantify giggles before and after he reached the goal. Morale in an organization should not be treated lightly, but if the objective is to improve morale, and the manager wants to identify improvements, he must come up with some identifiable results that show morale has improved. This could be, within the Navy, higher reenlistment rates or fewer requests for transfers. Another missing

element is the time frame.

United Air Lines has an eight hour course in writing objectives for their managers. Their definition of an objective is a written statement of results to be achieved, by when, and at what cost. Cost in this case could be manhours, dollars or material. Their outline for proper goal writing is

To do (what?) so as to get (what results?), by
(what date?), at a cost not to exceed (\$, M/Hrs.,
materials, etc.)

The important elements of the objective need only be filled in the blanks. It is important that these objectives be supportive of the objectives of the organization and be of a "stretching" nature. The manager should never set goals so unreasonably high he cannot reach them nor so low that they can be reached without additional effort.

In general, most people set goals at higher levels than their previous performance and the higher the intended level of achievement, the higher the level of performance. It has been found when goals are considered impossible to achieve performance decreased. It was also observed:

When individuals established low-level personal goals . . . their performance in turn was obviously low. [Carroll and Tosi 1973]

C. METHODS AVAILABLE

Reddin [1971] recognizes four methods for drafting the initial set of objectives. The first method mentioned is for the superior to simply hand the objectives to the manager. The second method is for the superior

to draft them then discuss them with the manager. Another method is for the manager to draft them initially and discuss them with his superior. The fourth method, which Reddin recommends, is for the manager and an MBO specialist to draft the initial goals and then both the manager and the specialist meet with the manager's superior to discuss the goals. [Reddin 1971]

A predominant weakness of the first method is that it does not get the manager involved nor does it develop his managerial ability; he simply carries out orders. The second method can often find the superior defending his objectives and becoming overly zealous in finding fault with ideas from his subordinate. Over time, this could result in less participation on the part of the manager and little or no feeling of commitment.

The third method, where the manager drafts the initial set of objectives and discusses them with his superior, is a more ideal situation. The assumption here must be that the manager is experienced and knows the overall goals of his organization. In this sense, the manager and his superior can both contribute to the goal setting function. It is possible, however, that the manager is incapable of setting objectives. In such a case the top down procedure depicted in method one is a must.

The fourth method requires a third party, the MBO advisor, to assist the manager in setting meaningful objectives. Another function of the advisor would be to meet with the manager and his superior during a goal setting session to help them reach an agreement on the established

goals. This outside agent should be able to offer his expertise and impartiality in assisting the manager and superior to reach measures of effectiveness for the decided goals and could reinforce the commitment of goals arrived at by the two individuals.

After the final goals have been established they must be written down. This formalizes the contract between the superior and the manager [Conley and Miller 1973].

Periodic reviews are an important aspect of MBO and their frequency must also be agreed upon by the manager and his superior. The reviews serve the following purposes:

1. None of the objectives are forgotten or overlooked.
2. Objectives can be revised if the objectives of higher level management are changed.
3. Procrastination is minimized.
4. Corrective actions can be initiated if the need is indicated.
[Simpkins 1966]

Periodic reviews should be conducted at least on a quarterly basis with the manager and his superior sitting down in a face to-face confrontation [Valentine 1966]. At these meetings the manager and his superior evaluate the progress toward the attainment of objectives and revise the objectives if necessary. It must be remembered, in the initial stages of MBO goals must be very flexible. Later they can become more firm.

D. METHOD CHOSEN

The method decided upon by the authors was a combination of Reddin's methods three and four. The authors were only available to assist the managers in writing objectives when they were at Stockton; the remainder of the time the managers were to use the folder in Appendix C.

Because of the factors mentioned in Section III the authors were required to abandon the goal setting method chosen and write the objectives for the individual managers. This posed a problem because the authors were then required to write the objectives for each level of management, and present their results to the individual manager for a critique. The manager would then reject or accept the objectives as they were written or he would indicate where the objectives needed to be revised. This was an excellent method for the authors to learn the inner workings of a COMMSTA, but was a hindrance in establishing meaningful objectives during the time available for the study.

E. ESTABLISHED OBJECTIVES

A few of the goals written by the authors which were accepted without any changes were as follows:

1. Reduce station operating cost by 5% during fiscal year 1975.
2. Increase first term reenlistments by 10% in fiscal year 1975.
3. Align communications department training to increase the number of personnel advanced in rate. Target for 15% increase on February '75 exam.

4. Increase up time with "full term" units by 20% by 1 August 1974.
5. Qualify two communications technical controllers as DCS coordinators by 1 October 1974.

The first two were agreed upon by the Commanding Officer; the third was for the communications department and the last two goals were for technical control. All goals were of a performance nature, quantifying something within a given time frame. The goals for the Commanding Officer could be used station wide or directed down the chain of command to technical control. The one for the communications officer could be used for his entire department, if he so desired, or only for technical control. The last two related directly to the functions of technical control and could only be used in that division.

Some of the objectives which were discarded and reasons for their rejection are as follows:

1. Move the Fleet Flash Net terminal in technical control to its new location (which had been previously decided upon) and have operational by 1 September 1974.

In this case the authors felt this was a minor objective to start the manager thinking about the reorganization of the technical control to accommodate the impending installation of the earth terminal for the fleet satellite and the relocation of major equipments within control. However, the manager wanted to delay the relocation of any equipment until a basic engineering design had been drawn and money had been made available.

2. Have all antenna radiation patterns checked and documented for Dixon (transmitter site) and Skaggs Island (receiver site) by 1 January 1975.

In this instance the managers knew the patterns were out of date and some radiation characteristics of the antennas had changed. This had a direct impact on how well the antennas could be managed to ensure good continuity on high frequency (HF) communications. It was felt that someone in higher authority should initiate the procedure of checking the antennas.

3. Improve CALS (communications area local station) capability by taking over CAMS (communications area master station) responsibility (as required by directives) starting 1 July 1974.

This requirement focuses attention upon the readiness of the COMM-STA's ability to take over the responsibilities of a master station in the event the master station is unable to carry out its duties. If deficiencies exist in the transfer of control it would show the need for training in this area. The responsibility to conduct the training lies with CAMS. It was felt CALS should not initiate a request for such training.

4. Conduct CAT visits to all ships that normally maintain full period terminations during FY 1975. Increase CAT visits to smaller units during the same time frame.

Communications Information Bulletins state CAT visits are to be requested by the ship's commanding officer. There was no desire to change this procedure or to initiate any correspondence on an informal

basis to suggest a CAT visit after a practice termination, even though it was admitted this was desirable.

Several objectives had to be revised to suit the desires of the managers. The basic concept behind the majority of these objectives were agreed upon but percentage rates or numbers had to be changed. Two such objectives are listed below as illustrations.

1. Exceed DCA standards by 2% for one full month on all circuits by 1 March 1975.

This objective was changed to read "Reduce AUTODIN rejections to .5% by January 1975." The objective, as finally stated seemed reasonable and attainable over the time period indicated and would certainly stretch the capabilities of the communications department.

2. Reduce non-deliveries by 10% per quarter for an overall reduction of 40% by 1 July 1975.

This objective was changed to read "Reduce non-deliveries to 2 per year by the end of next fiscal year." This final objective appeared realizable and reasonable and if attained would improve the overall effectiveness of the communications department.

Invariably, problems did arise in the use of words, numbers, percentages and time frames while discussing goals with individual managers. It had to be agreed upon that a 20% increase in HF continuity did not mean raising a figure of 85% of "up time" to 105%, rather it was only a small percentage decrease of the "down time" (3%).

Another area of concern was in keeping the managers from "shooting for the moon" and setting unattainable objectives. No manager tried to set low objectives that could be easily reached but, to the contrary, goals in many cases were too high.

F. PROBLEMS ENCOUNTERED

Most of the problems encountered were similar to those found in setting goals for any organization. There was no set of formalized, realizable command objectives for the managers to follow in setting their own objectives. Missions, tasks and functions for the command are well defined in directives from higher authority and a restatement of those responsibilities by the command is the only guideline the lower managers have in directing their effort toward setting objectives for the individual department or division.

The managers seemed more concerned with day to day "fire fighting" and were not concerned with longer range problems. As is inherent in many organizations, managers sometimes confuse "urgent problems with important problems." [Sibson 1969] Because of this deficiency most of the individuals were uncertain in their "position audit." They saw their job only as day to day problem solving and did not look to the cause of some of their problems. If the cause cannot be identified a goal for the resolution of the problem cannot be reached.

Some of the managers felt the determination of goals took an unreasonable amount of time even though they were involved in only the

review portion. There is no doubt that goal setting does take time but the results of the effort can be most rewarding.

Commander Naval Telecommunications Command and the Defense Communications Agency require records be kept and reports submitted concerning many facets of communications at a COMMSTA. Data such as the Naval Communications Statistical Summary compiled by the communications command and the daily MANREPS and DATAREPS submitted by the COMMSTA could be used to identify trends and potential problem areas at the COMMSTA and the units it services. Admittedly, some of the data in its collected form can be used in day to day performance feedback, however, it has not been used for longer range problem solving or goal setting.

As observed by Carroll and Tosi [1973] some managers will resist MBO because of the need for participation in the goal setting phase. There was no exception to this in the study and may be anticipated especially in a Navy environment. Higher level managers are not accustomed to negotiating with lower level managers, and the perceived loss of authoritative control over subordinates was noticed by the authors.

The last area that will be mentioned here is problems encountered due to the unique environment found at Stockton. It was difficult for the authors to set meaningful objectives in the area of professional development for the individual managers because several of them were nearing retirement and indicated they had no desires to continue a Navy career and had no plans for a second career. This could and did lead to a lack

of congruence between the objectives of the organization and those for the managers.

VI. RESULTS OF THE STUDY

A. INTRODUCTION

The results of this study were assessed largely by interviews conducted with the managers involved and by personal observation. Lengthy interviews were conducted throughout the study with all levels of management. The results of the questionnaires and the completed work folders provided quantifiable inputs. During the course of this study the authors learned a great deal about the operations of a Naval Communication Station, wrote some reasonable objectives, and hopefully started some managers thinking about MBO.

B. EARLY OBSERVATIONS

During the first portion of the study, the authors concentrated on observing the management procedures used at NAVCOMMSTA SFRAN and learning how the technical control division operated. Middle managers exhibited little interest in planning. They appeared to prefer reacting to current situations, instead of acting to achieve positive goals. Statements such as "I set my priorities on a daily basis" and "I wait until I hear how my boss wants to do this" were quite common. When asked to describe what he actually does on a day to day basis, one manager replied, "Mostly, I attend briefings and talk to people."

Most of the managers had either completed or were near completion of twenty years of naval service. Retirement plans were one of the

favorite topics of conversation. This is not meant to imply that nothing was being accomplished. On the contrary, operations seemed to be proceeding smoothly. However, it did indicate a reluctance to plan ahead and to try new ideas. There was little evidence of anticipatory management.

Those managers who had participated in the earlier MBO project [De Roco and Grutzius, 1973] indicated that they found MBO too time consuming and required too much paper work. They felt that the MBO advisors did not have sufficient time to complete the project. The managers who had not been previously involved with MBO expressed an early interest. Their interest tended to wane when they learned that MBO required specific objectives instead of "improved performance" or "reliable communications." Some managers were very reluctant to have their performance evaluation based on mutually agreed upon objectives.

C. QUESTIONNAIRE RESULTS

The questionnaires provided two distinct findings. The MBO Readiness Questionnaire indicated that higher level managers were more ready for MBO than those at lower levels of the chain of command. Further the managers were more willing to let their own subordinates operate in an MBO environment than the managers themselves were willing to operate with their superiors. The organizational attitude survey showed a strong correlation between job satisfaction and communication with one's superior.

D. THE OBJECTIVE WRITING PHASE

Once the decision was made that the authors would write the organizational objectives instead of the managers themselves, managerial participation was temporarily eliminated. This tended to reduce objective writing to a student exercise. The authors made every attempt to write meaningful objectives and interest the managers in implementing them. Objectives for the middle managers were sometimes written in a controversial manner in order to elicit comments. However, the managers seemed to treat the objectives more like good ideas than worthwhile goals. This phase consumed valuable time that could have been used for a dry run implementation phase.

As the authors' objectives were being critiqued and refined, the Commanding Officer's interest in MBO increased. However as the objectives became more specific, the middle managers began to have reservations about MBO. They emphasized that they considered it difficult to write objectives in areas where there were many variables. They wanted to keep goals vague and not be pinned down to specific commitments. "My goal is 100 per cent continuity, but I know I'll never achieve it" was a typical statement. Though never expressed, it was definitely implied that they did not wish to have their fitness report linked with MBO. This finding is at variance with other studies of MBO [Raia, 1965] [Meyer et al. 1965]

The work performance folders completed by participating managers listed objectives only in part D (Specific Job Goals). The other areas of

the folder were used to list items of a job description nature. It was difficult to convince the managers to think in terms of ends not means. It was disappointing to find that in one case the subordinate wrote less specific objectives for his own job than his superior had written. The managers indicated that writing meaningful goals was hard work.

E. FINAL OBSERVATIONS

In a final interview, the Commanding Officer concluded that MBO could be an effective management system. He stated that to be effective, a full fledged staff effort would have to be made by the organization itself. He would prefer to see MBO implemented in one department at a time (similar to the authors' approach) by a department head who was knowledgeable in MBO procedures. The Commanding Officer thought that MBO could be an aid in personnel evaluation, but cautioned that the evaluator must exercise considerable judgement when goals are not attained. Not only the individual but the goal itself must be considered carefully at this point.

The Communication Officer on the other hand vigorously opposed MBO. He found it too inflexible and time consuming. While he recognized the need for objectives, he stated that "putting them in writing made them meaningless." He felt that the presence of variables in a management situation made objective setting impossible. He further stated that the MBO project helped him reach a decision to retire from the service. This could be considered a positive outcome of the study.

The technical control officer stood the middle ground between the commanding officer and the communications officer in his opinion of MBO. To him management by objectives was an excellent vehicle for the young Ensign or Lieutenant junior-grade who needed assistance in learning a new job. He observed, however, a more experienced person with 19 to 20 years of service would have a difficult time adjusting to the goal setting participative methods MBO requires.

VII. CONCLUSIONS

Students conducting a research project are not likely to succeed in implementing MBO or any other management system. Without the active participation of an organization's management the system cannot be sold on its merits. The managers at NAVCOMMSTA SFRAN never considered MBO as "their" Project, it belonged to someone else. This project was always considered a "study," not something to be used as a management tool. It will not be easy for any organization to implement MBO. It will require the time and effort of all participating managers. Although the Bureau of Naval Personnel clearly states that management by objectives is an integral part of personnel evaluation, it is possible that managers will continue to fill out fitness reports in the same old subjective manner.

MBO relies heavily on participative management. There may be no room for participative management on the bridge of a warship, but there appears to be ample time for it in day to day routine operations and administrative matters. If one rejects unquestioning obedience to orders, one needs subordinates who think and participate. Other studies [Carroll and Tosi, 1973] have shown superiors unwilling to support participative management because they questioned their subordinates competence as a rationalization for their own unwillingness to get their subordinates involved. This study discovered middle managers who preferred to wait for directives before proceeding on their own. This gap needs to be

bridged and MBO could be a good means for this accomplishment.

The Navy's transfer policy makes it somewhat difficult for managers to focus on long range planning and results. Since a manager will normally hold a billet for only two or three years, he will naturally focus on short range results. This fact, plus the "learning period" required for the manager to become acquainted with his new job, will make the implementation of an MBO management system more difficult. However MBO type planning can be adjusted to accommodate two or three year planning cycles. Furthermore, once implemented, it can serve as a valuable continuity aid for a new manager while he becomes accustomed to his new billet. When he is settled in his new job he can modify objectives if necessary to coincide with his own special abilities.

At present, good measures of effectiveness are lacking in Naval Communications. There is no good way to measure the performance of one communication station against another. There are some good indicators such as reports published by AUTODIN automatic switching centers and the U. S. Naval Communications Statistical Summary published by Commander Naval Telecommunications. Measures of effectiveness established at headquarters level would be a great aid in establishing measurable objectives at the local level.

The successful implementation of MBO will require time (measured in years). To implement it throughout the Naval Telecommunications Command would require objectives set at headquarters level. Although select groups such as the Chief of Naval Operations Industry Advisory

Committee on Telecommunications (CIACT) have pointed to the need for better management in Naval Communications, recognition of this need must come from within the communications community. When communications managers want to improve their management systems, MBO could provide a helpful means.

VIII. IMPLEMENTATION GUIDE

A. INITIAL CONSIDERATIONS

This section will present a guide, in general outline form, for implementing MBO at a Naval Communication Station. However, it can just as easily be applied to any similar naval organization. The guide is based on actual experience gained at Stockton and research on the subject.

Before trying to implement MBO, two critical questions must be answered: will the commanding officer give the program wholehearted support, and secondly will he allow his subordinates considerable latitude in setting their own objectives to support the overall command objectives? If these two questions can be answered in the affirmative, then MBO can be implemented within the command. Without active command support there is little hope for success on an organization-wide basis. A negative answer would not prevent an individual manager from implementing MBO within his own department or division.

B. THE MBO ADVISOR

Highly qualified civilian MBO consultants are available for about \$500 per day. However, this does not appear to be a very cost effective way of implementing MBO in a military organization. Congress might take exception to expenditures on this scale.

However, if an organization decides to seriously pursue MBO, the designation of a command MBO advisor or coordinator would be highly desirable. This person should be attached to the command and have an active stake in management achievement. He should have a minimum of two years experience at a communication station. Two years is mentioned only as a guideline; the actual requirement is a man with a good working knowledge of COMMSTA management. Ideally the advisor should have some formalized management training and a working knowledge of MBO. Since a person with formal training is not likely to be available, one should look for a manager with an open inquisitive mind, a manager who is willing to stick his neck out and try a new idea. The person to avoid is the "seat of the pants" manager who constantly falls back on his 10 to 20 years experience in the field. This manager is likely to resist change of any type.

If a short MBO training course is available locally, the designated advisor should attend it. An orientation visit to an organization practicing MBO would also be very worthwhile. If a course is not available, reading will probably have to suffice. There are several excellent books available including: Mali [1972], Reddin [1970], Ordiorne [1965] and Carroll and Tosi [1973]. The bibliography of this study could be used as a reading guide. There is an abundance of periodic literature available. The Harvard Business Review is one of the best sources. The advisor should be given a month or so head start to prepare himself before starting the indoctrination phase. The objective here is to allow the

advisor a chance to gain a good working knowledge of MBO. This may require longer than one month.

C. INDOCTRINATION PHASE

Before starting the indoctrination phase, a group of managers to participate in a pilot project should be selected. It is recommended that this group consist of either the commanding officer and a selected number of department heads (one management level at a time) or the commanding officer and a selected span of the chain of command down to the working supervisor (division CPO) level. These managers should be selected from areas where their results can be easily quantified. Writing good objectives can be hard work so the task should not be complicated by selecting areas that are hard to quantify. Areas that lend themselves to measuring percentage of output increase, percentage of error decrease, cost savings, and effectiveness increase are the easiest to work with.

The indoctrination phase should be scheduled for about a month depending on the current commitment level of the command. A good way to start might be to use the Varney MBO readiness survey to see how ready the group is to use MBO. The results can pinpoint weak areas that require further development.

A series (minimum 3 to 5) of weekly two hour workshop sessions should be scheduled to allow the participants to study and discuss the principles and details of the program. Prior to each session it would be

highly advisable to provide each participant with reading material to study and be ready to discuss at the next session. The commanding officer's presence at each session will add strong impetus to the program.

The advisor should serve as the discussion leader during the workshop sessions. He can stimulate discussion by examining and inviting critique of the vehicles, such as the work performance folder, to be used in the project. The project must have some sort of control document similar to the work performance folder to serve as a common base. A simple set of instructions should accompany the folder. A single document is all that is required. Any increase in forms and reports will almost certainly doom the program.

There does not appear to be many training aids available that specifically address MBO. There is a series of six films with a study guide produced by John W. Humble [1969] a British management consultant that could serve as discussion stimulators. However, reading material appears to be the most readily available source of instruction. The advisor must use whatever aids that he has available to stimulate discussion not as lecture material. Active participation is mandatory in MBO and should start in the indoctrination phase.

Toward the end of the indoctrination period the group should practice writing objectives. The emphasis should be on writing meaningful, measurable, time scheduled objectives and assigning priorities to them. The objectives must be stated in terms of results not activities. Vague statements such as "improve efficiency" and "raise morale" must be

avoided. Critique of the practice objectives should provide grounds for worthwhile discussion.

One thing that is likely to be discovered during indoctrination is that agreed upon measures of effectiveness or standards may not be available to use in writing objectives. Every organization has a management information system, but it may not support overall objectives. The present system may not provide enough data to support MBO. What is an acceptable level of HF continuity? How many non-deliveries are tolerable? Past data will need to be reviewed and in some cases collected. This area could well add to the paperwork load, but any effective manager must have information available to make good decisions. Early objectives may well include establishing data collection systems to base long term planning and objectives on.

D. PILOT PROGRAM

Before plunging into MBO, a dry run period of about three months should be scheduled. Every effort should be made to integrate MBO with ongoing programs such as the budgeting or maintenance cycles. Performance reviews should coincide with fitness report submission schedules. The project must have specific time phased milestones. If it is not tied to the calendar, it will likely be put off. The objective of the dry run period is to learn by doing.

Command level goals will have to be established. These goals are very important. They will set the tone for the entire program. The

subordinate managers will then be able to align their objectives so that they feed into the accomplishment of command objectives. If more than one department is involved there may be a need for coordinating and interlocking some of their individual objectives.

The pilot program must be flexible and allow for a considerable margin of error. Subordinate managers should not be held rigidly to objectives that may prove to be unrealistic. During the dry run one should not hesitate to revise, substitute, or even eliminate objectives.

To get the program started each manager involved should write down his own objectives and objectives for his immediate subordinate. The two managers then meet to discuss the subordinates objectives. If possible, the MBO advisor should attend this meeting but serve only as a facilitator. The subordinate should be allowed to take the lead in the discussion as far as his capabilities will carry him. After discussing the objectives of the subordinate, a mutually agreed upon set of objectives should be arrived at and recorded. They should be recorded in smooth form in the work folder or whatever control document is used. The formal act of writing the goals down will make them more of a commitment on the part of the subordinate. These objectives will serve as a guideline for the subordinate in performing his job. A performance review date is set. This date should not be longer than three months after the goal setting meeting.

The results of the first round of performance reviews should point the way for further implementation. Objectives can be tightened up at

this point and hopefully made more realistic and relevant. Further means of integrating MBO with ongoing programs should be sought.

E. EXPANSION OF THE PROGRAM

The decision to expand the MBO program should hinge on the success of the pilot program. It is better to take the time to get the initial group running smoothly before moving on to the next. When expansion is begun, each new participating group should be given indoctrination and allowed a dry run.

If the one level at a time approach (commanding officer to department head) was taken initially, expansion to the next lower level (department head to division officer) can proceed in a fairly straightforward manner. If one span of the chain of command was used, the next span selected should be one that will require some coordination with the pilot group. This will allow experience to be gained in interlocking lower level objectives to support the overall command objectives. For example, select a department head - division officer - division CPO in a field closely related to the pilot group. Performance reviews should be held at least quarterly.

F. FINAL REMARKS

This guide has been deliberately written as a generalized outline. It would be easy to make specific recommendations of X number of workshop sessions or Y number of weeks to complete the indoctrination phase.

However a strict prescription for "the" management system is not likely to be written. If MBO is to succeed, it must be individualized to a certain extent to meet the needs of a given manager. MBO is somewhat of a delicate flower. It must be nurtured and given individual attention if it is to produce something of value. It is not a hardy weed that will grow unattended.

APPENDIX A
ORGANIZATIONAL ATTITUDE SURVEY

Pay grade

 / /
Last 3 digits
of service #

INSTRUCTIONS

Put your answers directly on this questionnaire. Think not only of your immediate supervisor but also of the supervisors directly associated with you and/or your job. Mark the box which best describes how well each statement fits the part of the organization in which you work. Please mark only one response for each question.

If your immediate supervisor has been in his position for less than one month, answer the questions regarding your previous supervisor.

RESPONSE

	Strongly Agree	Agree	Don't Know	Dis- agree	Strongly Disagree
1. Schedules and forecasts of our unit's work load are reasonable.	()	()	()	()	()
2. My supervisor gives me credit and praise for work well done.	()	()	()	()	()
3. My supervisor sees that I have the things I need to do my job.	()	()	()	()	()
4. My supervisors see that individuals are properly trained for their jobs.	()	()	()	()	()
5. Sometimes I feel my job counts very little in this organization.	()	()	()	()	()
6. My superior lets me know exactly what is expected of me.	()	()	()	()	()
7. My supervisor is objective (impersonal; unprejudiced) in evaluating those he supervises.	()	()	()	()	()
8. My supervisor has the work well organized.	()	()	()	()	()
9. We get advanced notice on important changes that involve our unit.	()	()	()	()	()

- | | Strongly
Agree | Agree | Don't
Know | Dis-
agree | Strongly
Disagree |
|---|-------------------|-------|---------------|---------------|----------------------|
| 10. It is easy for me to talk with my immediate supervisor whenever I ask. | () | () | () | () | () |
| 11. My organization has specific improvement objectives that my unit understands. | () | () | () | () | () |
| 12. The objectives for achievement in my unit are set in a way that the people accept them and have a strong interest in trying to attain them. | () | () | () | () | () |
| 13. Plans and programs make the best use of the experience and skills of members of my unit. | () | () | () | () | () |
| 14. When unit performance is improved, we get our fair share of the credit. | () | () | () | () | () |
| 15. Within my unit there is definite encouragement for members who try to improve performance. | () | () | () | () | () |
| 16. Those members of my unit who contribute the most are the ones who get rewarded the best. | () | () | () | () | () |
| 17. How often during the past year has your supervisor discussed his evaluation of your work performance with you? | | | | | |
| 5-7 times or more | () | | | | |
| 3 times | () | | | | |
| 2 times | () | | | | |
| 1 time | () | | | | |
| No time | () | | | | |
| 18. How satisfied are you with your supervisor's discussions with you about your work performance? | | | | | |
| More discussion than I desire | () | | | | |
| Discussion was about right | () | | | | |
| More discussion is needed | () | | | | |
| Much more discussion is needed | () | | | | |
| 19. Do you know what your supervisor wants you to get done during the coming year? | | | | | |
| Yes-we have discussed it | () | | | | |
| I have a pretty good idea | () | | | | |
| I'm not sure | () | | | | |
| I have no idea as to his expectations | () | | | | |

20. How aware is your supervisor of the job you have to do and how well you are doing it?

He pretty well knows that is going on ()

Most of the time he is well aware ()

Sometimes he is aware ()

Rarely is he aware ()

When he does give it attention, he
doesn't understand what's going on ()

APPENDIX B

MBO READINESS QUESTIONNAIRE

Each of the following items describes some aspect of your relationship with your subordinates. Read each item and then circle the response (1, 2, 3, 4, 5) which most nearly reflects the extent of your agreement or disagreement. Try to respond according to the way you would actually handle the situation on the job.

The best way to get good performance out of subordinates is to	RESPONSE				
	Agree Completely	Mostly Agree	Partially Agree	Mostly Disagree	Disagree Completely
1. Allow subordinates extensive freedom to plan and organize their own work	1	2	3	4	5
2. Allow subordinates to hold group discussions to work out their differences and conflicts.	1	2	3	4	5
3. Not give them information unrelated to their immediate work.	1	2	3	4	5
4. Spell out exactly what their jobs are and what is expected of them.	1	2	3	4	5
5. Always insist that they solve their own work problems, but be available as a consulting resource to them.	1	2	3	4	5
6. Maintain tight controls on all work to be sure things don't get out of line.	1	2	3	4	5
7. Provide resources so each person can develop his particular strengths and capabilities to the fullest.	1	2	3	4	5
8. Set up systems where information on work performance goes directly to the subordinate instead of through you. (Does not include fit reps or pers evals)	1	2	3	4	5
9. Discourage subordinates from getting involved in the "why" of doing their job.	1	2	3	4	5
10. Bring subordinates together in joint meetings to make decisions and solve mutual problems.	1	2	3	4	5

11. Give them full information about their jobs, the station and the Navy.	1	2	3	4	5
12. Tell subordinates where they are going wrong and convince them of the merits of changing their attitudes and approaches.	1	2	3	4	5
13. Solve problems for them as quickly as possible so they can get back to work.	1	2	3	4	5
14. Allow subordinates to take the responsibility for controlling and managing their own work.	1	2	3	4	5
15. Encourage subordinates to redesign their jobs around their own capabilities.	1	2	3	4	5
16. Leave subordinates alone and count on them to get their job done.	1	2	3	4	5
17. Clamp down on conflict and friction between subordinates.	1	2	3	4	5
18. Train subordinates to do their work according to standard procedures.	1	2	3	4	5
19. Insist that subordinates stick to their jobs and leave decisions and planning to you.	1	2	3	4	5
20. Discourage subordinates from introducing new ways of doing their work without first checking with you.	1	2	3	4	5

INSTRUCTIONS FOR SCORING

- (1st) Circle following numbers 1, 10, 11, 15, & 16.
- (2nd) X through following numbers 2, 5, 7, 8 & 14.
- (3rd) Underline the following numbers 3, 4, 9, 19 & 20.

Place a number "1" beside the circled and X'd questions where your response was either 1 or 2 (agree completely and mostly agree).
- (4th) Place a number "1" beside the underlined and unmarked questions where your response was 4 or 5 (mostly disagree and disagree completely).
- (5th) Add up the "1's" for circled and X'd questions and mark your position on the MBO Readiness Profile under the S/J heading.
- (6th) Add up the "1's" for the underlined and unmarked questions and mark your position on the MBO Readiness Profile under the S/S heading.

M.B.O. READINESS PROFILE

	S/J	S/S
	Subordinate's Job (How you see your subordinates man- aging their jobs)	Supervisor's Job (How you see your- self managing your own job)
	— 9	— 9
M.B.O. Range	— 8	— 8
	— 7 — — — — — 7 —	
	— 6	— 6
Transitional Range	— 5	— 5
	— 4	— 4
	— 3 — — — — — 3 —	
	— 2	— 2
Non-M.B.O. Range	— 1	— 1

APPENDIX C

PERSONNEL DEVELOPMENT AND EVALUATION WORK PERFORMANCE FOLDER

NAME _____ Fiscal Year 197 _____
 ORGANIZATION _____ Grade/Rank _____
 POSITION TITLE _____ Age _____
 Years of Federal Service _____
 Years at Present Job _____

THIS WORK FOLDER IS A MANAGEMENT TOOL NOT A REPORT

OBJECTIVES OF THE PROGRAM

1. To promote two-way communication between the individual and his supervisor.
2. To identify and integrate individual and organizational objectives.
3. To support and promote individual and organizational development.
4. To encourage results-oriented management.
5. To establish a results-oriented assessment of individual performance.

GOAL SETTING METHOD

1. Review the outline of the goals and controls procedures on the back of this folder and any special procedures established by your organization.
2. After the initial briefing, each manager should complete the first sections of A through C for his own job. After that he should do the same for each person who reports to him.
3. The manager should again meet with his supervisor and mutually agree on personal and job goals for the coming year.
4. Both the supervisor and subordinate will have a copy of the agreed upon work folder and it becomes a working document.

FEEDBACK

1. During the next 12 months the supervisor will hold periodic review meetings. These will be held at least each 3 months and will review progress toward the objectives. He will provide assistance in reaching goals and making any changes in goals as necessary.
2. After 12 months, the remaining sections of the folder will be completed and discussed with the individual and a new sheet will be proposed for the next year.

How This Job Contributes To The Organization's Missions

A. Instructions	A. Personal Development	
1. Note as accurately as possible the type of work this individual wants to do in the next 2 years. It is also desirable to include longer-run career desires.	1. Career Aspirations	
2. Indicate this person's greatest strengths which can be used to achieve future career aspirations.	2. Greatest Strengths	
3. Indicate any specific managerial, professional or technical areas requiring training or further development.	3. Areas Requiring Development or Training	
4. After discussing 1, 2, & 3, the individual and his supervisor develop a plan to meet career aspirations through personal development. A few personal goals are mutually agreed upon and written in Section 4, the achievement of these goals should increase the individual's knowledge, ability, skill or potential.	4. Personal Development Goals For The Year	Evidence of Accomplishment

PERSONNEL DEVELOPMENT & EVALUATION

B. Instructions

1. In this section the major responsibilities which are professional or technical are noted. These responsibilities are specific to this particular professional job.

2. Determine which professional or technical aspects of the job are the most important. You might start by listing all such aspects of the job and then reduce the list to the critical few which are listed on this performance sheet. As a general rule, only about 20% of the various tasks one does are actually of critical importance and these may take the major part of one's time. These critical few technical or professional parts of the job should have clearly stated objectives, achievement levels, an explicit statement of evidence of accomplishment and a date for goal accomplishment. The remaining tasks need not be entered on this sheet. But if performance on the omitted aspects becomes deficient and is affecting the individual's overall performance, then it is appropriate to enter the task in this section. Each item on the sheet will be reviewed at least quarterly.

C. Instructions

1. In this section the major managerial responsibilities of the individual are noted. These responsibilities are general managerial functions such as planning, controlling, staffing, organizing, directing, communicating, supervising, and developing subordinates. How well an individual accomplishes these parts of his job is more difficult to measure than the professional or technical aspects, but is of vital importance for a line job and some staff positions.

2. As the year progresses specific incidents occur which will be viewed as specific examples of desirable or undesirable managerial performance. Such critical incidents influence how the managerial goals have been accomplished and offer a beginning point for dialogue between the individual and his supervisor. You should note the critical incidents in this section. Be as precise as possible about what occurred and the circumstances surrounding the event. You may want to make notes on separate paper and discuss them at the next review session. Even if you have separate notes, indicate the nature of the critical incident in this section. Few individuals are equally strong or equally weak in performing all managerial responsibilities. Noting these strengths and weaknesses will allow you to recognize reoccurring patterns. These patterns can be a basis for overcoming weakness and building on strengths.

3. The development of subordinates is a primary managerial responsibility. Each manager should have the development of his subordinates as one of his specific managerial goals.

D. Instructions

1. In this section specific tasks, projects, assignments, duties, etc. which are part of this individual's job in the coming year are noted. Some of these efforts are for only a few months, some are intermediate in length (6 months) and some are a year or more in length. An effective manager has some tasks in each of these categories. As the short range objectives are satisfactorily completed, new short run objectives can be added but the whole work performance schedule must be considered. Through effort, most managers can plan and schedule so as not to be consistently solving some "unforeseen" problem.

2. When setting goals the supervisor can set them alone or involve the individual in goal setting. When feasible, mutual goal setting is recommended because when an individual participates in goal setting, he is more likely to take personal pride in completing the task.

3. Frequently differences of opinion exist between levels of supervision as to what should be worked on, the priority of various tasks, and what level of achievement and evidence of achievement is used to appraise performance. By specifying these in enough detail so that both the supervisor and the subordinate clearly understand, many misunderstandings may be avoided. Each goal should; a) be clearly stated, b) indicate what evidence will be used to determine if and to what extent the goal was achieved, and c) state when the goal is to be met. The manager should indicate the relative importance of the different goals.

Employee Name _____

Dates of Quarterly Review _____

Annual Review _____

B. Professional and Technical Job Responsibilities

C. Managerial Aspects of the Job

D. Specific Job Goals

F. Year-End Performance Summary

Instructions	SUMMARY																
<p>1. Describe this individual's performance over the last year. Your write-up should be clear and precise. It should be based on the goals set and what actually occurred throughout the year. Personal development, technical performance, managerial performance and specific job goals should be explicitly noted. After the Year-End Performance Summary is completed the Performance Summary should be discussed with the individual. The main purpose is to communicate what work needs to be done for the next year.</p>	<p>1. Supervisor's Overall Evaluation of Work Performance</p>																
<p>2. Considering this individual's career aspirations and your appraisal of his work performance make a recommendation for future jobs or a career path.</p>	<p>2. Career Path Plan and Recommendations</p>																
<p>3. Indicate which of the five statements best describes this individual's overall job performance in both job related goals and personal development goals.</p>	<p>3. How Well the Individual Accomplished The Goals</p> <table border="1"> <thead> <tr> <th></th><th>Job</th><th>Personal</th></tr> </thead> <tbody> <tr> <td rowspan="2">Outstanding {</td><td>Far Exceeded All The Goals</td><td></td></tr> <tr> <td>Exceeded Most of The Goals</td><td></td></tr> <tr> <td rowspan="2">Satisfactory {</td><td>Meets Normal Requirements and Goals</td><td></td></tr> <tr> <td>Meets Minimal Requirements and Goals</td><td></td></tr> <tr> <td>Unsatisfactory {</td><td>Did Not Meet Requirements or Goals</td><td></td></tr> </tbody> </table>		Job	Personal	Outstanding {	Far Exceeded All The Goals		Exceeded Most of The Goals		Satisfactory {	Meets Normal Requirements and Goals		Meets Minimal Requirements and Goals		Unsatisfactory {	Did Not Meet Requirements or Goals	
	Job	Personal															
Outstanding {	Far Exceeded All The Goals																
	Exceeded Most of The Goals																
Satisfactory {	Meets Normal Requirements and Goals																
	Meets Minimal Requirements and Goals																
Unsatisfactory {	Did Not Meet Requirements or Goals																

4. Signatures

Date

Individual Appraised _____

Appraiser/Supervisor _____

Appraiser's Superior _____

If the individual appraised, his supervisor or the appraiser's superior wishes to comment on the appraisal, attach the written statement to the completed Work Performance folder.

☐ See Attached Statement

OUTLINE OF THE PROCESS OF PERSONNEL EVALUATION AND DEVELOPMENT

Goals and Controls Concept

The idea of management by goals and controls is not new, it is used by many of the largest organizations in government and private enterprise. The objective of this method is to direct the work effort of the individual to accomplish results which will produce what management desires while including the goals and desires of the individual. This method can be effectively used to promote a "results-oriented" organization. This folder is a live-management tool and should be used regularly.

Goal Establishing Procedures

Most effective managers have results or goals in mind when they perform their duties. It has been found that explicitly writing down goals and talking them over with your subordinates will improve your effectiveness as a manager and will give your subordinates a clearer understanding of what is expected of them. The paper work detail, which at first seems excessive soon becomes routine and contributes to your managerial effectiveness.

You will prepare preliminary work sheets (which resemble sections A through D of this folder) for your job and preliminary sheets for each of your subordinates. After meeting with your superior and agreeing on your goals, the Work Performance folder is completed. Usually the superior and subordinate each have copies of the agreed upon goals. This process cascades down the organization to the first level of management.

Setting Your Own Goals

The first step in the program is an initial briefing with your supervisor. He will discuss the goals he has worked out with his supervisor. Goals have been set above your level of management and your work must produce results which allow your supervisor to meet his objectives. After your initial briefing, complete the biographic sections on top of the first page and part A of this folder. A group appraisal of your work (No. 2, 3, & 4) can be of assistance here. After completing A, go to B, C & D and write down the critical achievement levels, and have specific times for completion. It is especially important that goals identify results to be achieved rather than activities which accomplish results. A manual that discusses goal setting is available.

The second step is a goal setting meeting with your supervisor. You will discuss your personal goals, the goals of the job as you see them and how he sees them. In addition, you will discuss the ways to make all the goals fit together. Do not be surprised if on the first meeting you two do not see eye to eye. Your supervisor may have changed his goals and may want you to reconsider certain of your own goals. It is best to focus on the future as soon as possible — the past cannot be changed. After you have worked out your goals for the next year, think of how your subordinates can direct their efforts at achieving your objectives. Of course, this was part of your thinking when you worked out your own goals because your job as a manager is to direct your subordinates in accomplishing the objectives of your organization.

Establishment of Goals With/For Subordinates

The third step is to integrate your goals and those of your subordinates. First indicate how your subordinate contributes to the organization's goals. Remember this is not a job description of activities, but a description of general results which cause your organization to meet its goals. The manual may help here too. Complete section No.'s 2, 3, & 4 of A. Write sections B, C, & D. You should be as clear as possible, have a measurable achievement level, a time for completion, and the goals should be result-oriented. As soon as you have written down these goals, meet with the individual, he will have written down goals as he sees them too. Again do not be surprised if you have to work out what is to be done, what evidence will be used to evaluate the results, and what is the proper time for completion of the goal. It is best to have an open mind toward the views of your subordinates — this is not permissiveness. Just as you know aspects of your job better than your superior, your subordinates have much to contribute to goal setting for their jobs. After working out goals with your subordinates, it is a good practice to discuss them with your superior to insure that all efforts are directed to the appropriate result areas.

The fourth step is to monitor the progress toward the goals. This is the part of management to which you are most accustomed. Quarterly reviews are the minimum. Give coaching and guidance frequently. As conditions change, re-evaluate the goals as necessary. This sheet should be referred to often. In section E, the manager notes the progress toward the goal. When incidents occur which indicate relatively high or low managerial performance, they should be written in this section. These can be used as examples in guiding and coaching your subordinates in improving their managerial capabilities.

The final step is to appraise the individual on what has been accomplished and set goals for the next year. Remember, this is a working menu of management, not a report to management.

APPENDIX D

Management by Results

These instructions are intended to help explain the use of the work folder and the basic ideas of the management by results method. It is suggested that you read the work folder first and then refer to it as you read these instructions. Initially you will be asked to complete sections A through D of the work folder. After that has been accomplished, you and your immediate supervisor will decide how and when the remainder of the folder will be completed. A progress review toward the accomplishment of your objectives will be conducted at three month intervals. Three months will allow sufficient time for you to institute your plans and start moving toward your intended goals.

This program is not designed to teach you how to be a manager. Everyone participating is already an experienced manager. Further, it is not designed to be an input for anyone's evaluation or fitness report. (Although it obviously could be used for that if you so desired.) The idea is quite simply to provide a tool for getting the job done better, both for the individual and the organization.

The Concept of Management by Results

This idea has been called by various names: management by results, by objectives, goals and controls, and results oriented management. It first appeared formally in the 1950's; and since that time, many articles

and several books have been written on the subject. It is widely used in private industry and is beginning to catch on in government.

The whole idea of managing by results is to blend individual plans and goals of different levels of management (chain of command) toward the large scale accomplishment of common goals within a specific time frame. It involves finding and setting objectives, reaching agreement on objectives between superior and subordinate, implementing a plan of accomplishment, and controlling and following through on the objectives. The commanding officer and a new third class petty officer will obviously have a different set of objectives. However, their objectives can and should point in a common direction.

Managing by results is based on several premises, including the following two:

The clearer the idea of what you want to accomplish,
the greater your chances are of accomplishing it.

Real progress can only be measured in relation to
what you are trying to make progress toward.

In other words, if you know where you are going, it is easier to get there, you can get there faster, and you will know it when you arrive.

This may all sound rather simple, but perhaps it is deceptively simple. Most leaders feel that they are managing for results and that their objectives are clear. However experience has shown that subordinates and superiors don't always understand or share a leaders' objectives or set of priorities. It is vitally important that each level of the chain of command have and follow mutually understood objectives. You

can't expect to score unless the team plays together.

Setting Objectives

The heart of the management by results program is setting meaningful, measurable, time scheduled objectives.

However, before setting objectives, let's take a look at your assigned tasks which are to be listed in sections B and C of the folder. It is best to start by listing the things you do on a day to day, week by week basis. Next, assign priorities to these tasks based on which are the most important in contributing to the effectiveness of your unit. Now examine the top 20% of your tasks or at a minimum the top four. Experience has shown that by concentrating on the top 20% and handling the remaining 80% in the current routine fashion, a manager can contribute the most to his organization.

After listing your tasks, take a look at your objectives. A good way to start is to ask yourself questions like where are we now, how did we get there, what happened in the past? Next consider what things will be like during the next year. Will the job be the same, will there be new requirements, will the personnel situation change, will we have new equipment? Finally consider what you can do to improve your job and the command.

Your goals should be reasonable, neither too hard nor too easy. The ideal goal is one that can be attained by expending a little extra effort; one that requires you to stretch a bit to reach it.

Now list your goals. The parts of your job that are continuing in nature should be put in (B) professional and technical responsibilities. The second category of goals is managerial goals (C). Here you should list items involving organizing, controlling and training subordinates. The third category is called specific job goals (D). This section relates to special projects that you would like to accomplish or that your superior might have in mind.

When you have finished listing your objectives you are ready to discuss them with your superior. The purpose of this meeting is to determine what goals are to be set for the coming year. Since you and your superior look at things from different angles, don't be surprised if you two view your job quite differently. Your discussions and resolutions of these differences could be one of the most valuable results of the program. After discussion, an agreement on one set of goals should be made. Normally the final set will include ideas from both you and your superior. The agreed upon goals are then recorded in your folder.

Tips on Setting Effective Goals

Managers who are not accustomed to the idea of managing by results tend to use fuzzy words when they list objectives. Goals like improve morale, increase efficiency, maintain reliable communications, and reduce downtime are examples of "fuzzies." While these are certainly worthwhile ideas, how do you measure good morale or acceptable efficiency. The trick to getting rid of "fuzzies" is to make them measurable. Obviously, you can't measure anything but with a little practice you can

come pretty close.

The following ideas will help you in setting objectives:

- (1) Write goals in terms of results - not activities. EXP:
"Have color TV in BEQ" not "Improve habitability in BEQ"
- (2) The goal should be measurable. EXP: "Increase first term re-enlistments by 10%"
- (3) Each goal should have a completion date or time schedule.
EXP: "Reduce the number of non-deliveries 20% by 1 Jan."
- (4) Evidence of goal accomplishment must be included in the statement. EXP: "Complete a college course in basic electronics with a grade of B or better."

Here are some examples of complete objectives:

1. Increase the number of CAT team visits by 4 during fiscal 1975.
2. Develop a training plan to get ready for fleet satellite communications. Submit the plan to the CO by 1 September.
Training will be completed by 1 January 1976.
3. Reduce the operating budget by 10% during the next six months.
4. Increase HF path traffic quality availability to 87% by
1 October 1974.
5. Train and qualify one man per section as a watch supervisor
in tech control by 1 December 1974.

Conclusion

You may be having the feeling that you've been doing things like this throughout your career, but haven't bothered to write them down. That's

probably true, but there are many good reasons to formalize objectives in writing. By aligning objectives at each level of the chain of command it's much easier to get everyone moving in the same direction. It allows superior and subordinate to better understand each other's problems and work them out together. It can certainly provide more job satisfaction when you know where you're going and how you can get there.

The following is the suggested step by step procedure for getting started with managing by results.

- (1) Read over the folder and these instructions.
- (2) List your currently assigned tasks and assign priorities to them:
- (3) Take a look at your current position and determine your objectives for the coming year.
- (4) Complete sections A through D on the extra forms provided.

Each manager completes one for himself and one for his next immediate subordinates in the chain of command. The forms completed on subordinates can be less detailed than your own.

- (5) Meet with your next superior to determine mutually agreed upon objectives for the coming year.
- (6) Record the mutually agreed on objectives in your own colored folder.
- (7) Implement your plans for achieving your objectives.
- (8) Evaluate the results of your plans with your superior at agreed upon intervals.

**PERSONNEL DEVELOPMENT AND EVALUATION
WORK PERFORMANCE FOLDER**

NAME Edward L. Jordan

Fiscal Year 197 5

ORGANIZATION USS HANSON (DD 832)

Grade/Rank E-8, RMCS

POSITION TITLE Senior RM, CPO for OC Division

Age 32

Years of Federal Service 14

Years at Present Job 1 yr

THIS WORK FOLDER IS A MANAGEMENT TOOL NOT A REPORT

OBJECTIVES OF THE PROGRAM

1. To promote two-way communication between the individual and his supervisor.
2. To identify and integrate individual and organizational objectives.
3. To support and promote individual and organizational development.
4. To encourage results-oriented management.
5. To establish a results-oriented assessment of individual performance.

GOAL SETTING METHOD

1. Review the outline of the goals and controls procedures on the back of this folder and any special procedures established by your organization.
2. After the initial briefing, each manager should complete the first sections of A through C for his own job. After that he should do the same for each person who reports to him.
3. The manager should again meet with his supervisor and mutually agree on personal and job goals for the coming year.
4. Both the supervisor and subordinate will have a copy of the agreed upon work folder and it becomes a working document.

FEEDBACK

1. During the next 12 months the supervisor will hold periodic review meetings. These will be held at least each 3 months and will review progress toward the objectives. He will provide assistance in reaching goals and making any changes in goals as necessary.
2. After 12 months, the remaining sections of the folder will be completed and discussed with the individual and a new sheet will be proposed for the next year.

How This Job Contributes To The Organization's Missions

<p>A. Instructions</p> <p>1. Note as accurately as possible the type of work this individual wants to do in the next 2 years. It is also desirable to include longer-run career desires.</p> <p>2. Indicate this persons greatest strengths which can be used to achieve future career aspirations.</p> <p>3. Indicate any specific managerial, professional or technical areas requiring training or further development.</p> <p>4. After discussing 1, 2, & 3, the individual and his supervisor develop a plan to meet career aspirations through personal development. A few personal goals are mutually agreed upon and written in Section 4, the achievement of these goals should increase the individual's knowledge, ability, skill or potential.</p>	<p>A. Personal Development</p> <p>1. Career Aspirations Advance to Warrant or commissioned rank To be OINC of an independent comm unit</p> <p>2. Greatest Strengths Technical knowledge of comm. equipment. Also has complete understanding of comm procedures and organizes the work of his unit very effectively.</p> <p>3. Areas Requiring Development or Training Often does work himself instead of delegating it to subordinates. Sometimes intolerant of honest mistakes made by young strikers. Needs to improve his writing ability.</p> <p>4. Personal Development Goals For The Year</p> <ol style="list-style-type: none"> 1) Turn over 40% of present maint. responsibility to PO1 Charles by 1 Aug 74 2) Complete naval training course in leadership by 1 Jan. 3) Complete college level USAFI course in english composition by 1 Apr 75 with grade of B+ or better 4) Pass warrant exam on next scheduled administration date. 	<p>Evidence of Accomplishment</p> <p>Listed PMS maint. schedule</p> <p>Ltr of completion</p> <p>Ltr of completion</p> <p>Published results</p>
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B. Professional and Technical Job Responsibilities

- 1) Insure all PMS completed on schedule in FY 75. No more than 10% of the jobs per month should require rescheduling.
- 2) Reorganize present msg logging and filing system by 1 Feb 75. Update departmental instructions accordingly.
- 3) Have 60 day supply of consumables on board 3 wks prior to deployment.
- 4) Have all antennae cleaned by 10 Oct.

C. Managerial Aspects of the Job

- 1) Train and qualify two more watch supervisors prior to WestPac deployment 1 Nov.
- 2) Conduct one general military training session per month during FY 75.
- 3) Check clearance level of all RM's by 15 July. Update where necessary and insure any investigation requests leave the ship by 15 Aug.
- 4) Check field change status of all comm gear by 30 Nov. Develop a cooperative plan with ET's to install all required changes by 1 June 75.

D. Specific Job Goals

- 1) Develop a departmental instruction to implement "shotgun" routing throughout the ship. Submit plan to Comm Officer by 15 Aug; install new system by 1 Sept.
- 2) Arrange an orientation visit to NavCommSta SFRAN for eight RM prior to deployment.
- 3) Have all required Comm training exercises completed by 1 May 75. All grades 90 or above
- 4) Win the green Communications "C" for this competitive period.

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